

## Entrepreneurship Education: Assessing the Effectiveness of the Module from Students' Perspective

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### ABSTRACT

*There has been a phenomenal growth in the number of institutions offering entrepreneurship programmes because of the rising awareness of the significance of entrepreneurship education from public authorities. Although, the number of entrepreneurship education is increasing, the rate at which the programme is assessed with respect to teaching methods, contents, and its harmonisation towards the desired objectives of the programmes is minimal. In order to empirically ascertain the state of the module, it becomes prudent to examine the effectiveness of the module from the perspective of the students. A case study approach was adopted using students of Cape Coast Polytechnic, Ghana. Purposive sampling was used and questionnaires were administered to the students. The result revealed a mixed findings as students were appreciative of the key concepts of the module but wanted more improvements in some other aspects. Given the mixed findings, entrepreneurship education in Ghana needs a paradigm shift if it is to achieve its intended objectives as suggested by the researchers per the observation from the findings.*

**Keywords:** Entrepreneurship education, entrepreneurship module, students' perception

### INTRODUCTION

Entrepreneurship education has emerged over the past two decades as the most potent economic force the world has ever witnessed. The growth can be seen as indicative of widespread governmental belief in the positive impact that entrepreneurship can have on the socio-economic and political infrastructure of a nation (Matlay, 2008). Public policy makers recognise the importance of entrepreneurship as determinant of economic development and hence support instruments like entrepreneurship education to increase entrepreneurial activity (Fayolle et al., 2006). The value of, and the need for entrepreneurship education, which explains its phenomenal growth can be summed up in a report by the Global Education Institute (GEI) of the World Economic Forum (2009) which stated that while education is one of the most important foundations for economic development, entrepreneurship is a major driver of innovation and economic growth. Entrepreneurship education plays an essential role in shaping attitudes, skills and culture from primary level up. In other words, entrepreneurial skills, attitudes, and behaviours can be learned, and that exposure to entrepreneurship education throughout an individual's learning path, starting from youth and continuing through adulthood into higher education- as well as reaching out to those economically or socially excluded is imperative.

The emerging consensus in academia is that, entrepreneurship education or at least certain aspects of it, can be taught, or can be encouraged through entrepreneurship education (Gorman et al., 1997; Kuratko, 2005). As scholars reach a consensus that even if entrepreneurship cannot be wholly taught, certain facets of it can be taught. (Fayolle et

al.,2006) poses a pertinent question that ought to be answered: that what should the objectives, contents, teaching pedagogies and evaluation process of these programmes be? It has been argued that there is limited information present with regards to entrepreneurship education as the literature in the area has only began to grow over the past two decades (Garavan and O Cinneide, 1994). According to Sexton and Upton (1988), studies relating to teaching effectiveness and entrepreneurship courses have been limited.

Providing numerous entrepreneurship courses and programmes is important but they will not be of benefit if students are not satisfied with them. This was one of the main reasons for conducting this study. Courses should be tailored to students' needs without forgetting that students need to be equipped with the necessary skills to thrive as successful entrepreneurs. As this study focused upon the entrepreneurship module it was important to not only examine whether students were satisfied with the module but also to examine the wider impact of the module such as whether they had an impact upon students' career aspirations. Clark *et al.* (1984) argue that few entrepreneurship courses evaluate the impact the course has had on new venture creation, via student attitudes and actions, following completion of the course. As the growth of new ventures helps with economic prosperity it was important to examine the effects of the module on this. As a result, this study was conducted to assess entrepreneurship education from the perspective students.

## LITERATURE REVIEW

This section examines the literature related to the study as well as the conceptual framework that will guide the study.

### Meaning of Entrepreneurship and Entrepreneur

According to Barringer and Ireland (2008), entrepreneurship is the process by which individuals pursue opportunities without regard for the resources they currently control. Timmons and Spinelli (2007) looking at entrepreneurship see it as a way of thinking, reasoning and acting that is opportunity obsessed, holistic in approach and leadership. Rayne (1982) argues that entrepreneurship consists of the process of creating a business venture in order to exploit a new process, product, service or market. As with defining entrepreneurship, many entrepreneurship scholars have given different conceptual definitions of the entrepreneur (Kirby, 2004; Ireland & Webb, 2007). According to Kuratko and Hodgetts (2007), entrepreneurs are individuals who see opportunities where others see chaos and confusion. Scarborough and Zimmerer (2006), see entrepreneurs as people who exist for the purpose of achieving profit and growth by identifying opportunities and assembling the requisite resources to exploit these identified opportunities. Given the above definitions, entrepreneurship can be seen as a complex discipline and many scholars from diverse disciplines of study have attempted to define it from their own perspective of study.

### Entrepreneurship Education

Alberti et al. (2004) define entrepreneurship education as the structured formal conveyance of entrepreneurial competencies, which in turn refers to the concepts, skills and mental awareness used by individuals during the process of starting and developing their growth oriented ventures. Entrepreneurship education is also seen as consisting of all efforts which sensitize the addressed target group to eventually find a business rather than working in the corporate world (Bechard & Gregoire, 2005).

Linan (2004) found that there are four different kinds of entrepreneurship education programmes. The first, "Entrepreneurship Awareness Education", aims to increase knowledge about entrepreneurship and to influence attitudes that may impact intentions. The

second category is described as “Education for Start-Up”. These programmes are geared toward people who generally already have an entrepreneurial idea and need to solve practical questions about becoming self-employed. The third category, “Education for Entrepreneurial Dynamism”, focuses on people who are already entrepreneurs and want to promote dynamic behaviours after the start-up phase. The last category “Continuing Education for Entrepreneurs” describes life-long learning programmes and focuses on experienced entrepreneurs.

Along with the different types of entrepreneurship education, there are four research streams of entrepreneurship education (Bechard & Gregoire, 2005). The first stream focuses on the role of entrepreneurship programmes on the individual and society. The second is concerned with the systemisation of entrepreneurship programmes, for example, the use of multimedia environments or curriculum development. The third stream researches the content and its delivery in entrepreneurship programmes, and the fourth stream concentrates on the needs of individual participants in entrepreneurship programmes. This study looks at all the four streams of entrepreneurship education research.

Many studies have shown that entrepreneurship education has a positive impact on students’ view about entrepreneurship, entrepreneurs and self-employment (Peterman and Kennedy, 2003; Fayolle et al., 2006; Cheung, 2008). However, Oosterbeek et al. (2010) call for more research in the impact of variant entrepreneurship programmes. Von Graevenitz et al. (2010) state that, little is known at this point about the impact of these (entrepreneurship) courses. In particular, it is largely unknown how the courses impact on students’ willingness to engage in entrepreneurial activity.

### ***Teaching Entrepreneurship***

It has been argued that it is not possible to teach entrepreneurship which has a lot to do with talent and temperament (Marques and Albuquerque, 2012; Thompson, 2009). Kirby (2004) believes that teaching entrepreneurship is an undertaking that in both time and scope is beyond the capabilities of an academic business school. Politis (2008) added that formal entrepreneurship training is less likely to have a strong and direct effect on entrepreneurial knowledge development. Hwang (2009), in his contribution to the debate, argues that great entrepreneurs were not produced by higher education. Henry et al (2005) put up similar argument that entrepreneurship has to do with individuals’ characteristics and consequently it can be difficult to teach.

Scholars who affirm that entrepreneurship can be taught appear to be connected to more traditional techniques which are necessary if one is going to run a business such as accounting, budgeting and marketing (Nilsson 2012). Miller (1987) makes a distinction between teachable and the non-teachable aspects of entrepreneurship. He is of the opinion that not all aspects of entrepreneurship can be taught. However, Miller (1987) thinks that education can provide understanding of the rigorous techniques necessary for starting a venture.

The emerging consensus in academia is that, entrepreneurship or at least certain aspects of it, can be taught, or can be encouraged, through entrepreneurship education (Gorman et al. 1997; Kuratko, 2005).

### ***Role of the “Teacher” In Entrepreneurship Education***

One needs to consider the importance the teacher plays in entrepreneurship education. This is an area, which has been studied by Gibb (1996) who argues that teachers face a possible challenge when teaching entrepreneurship because it may be the case that they are teaching it

using what he calls a “conventional approach.” Such an approach is quite authoritative in the sense that the teacher focuses solely on content and “know-how.”

On the other hand Gibb (1996) argues that in order to successfully teach entrepreneurship an “enterprising approach” needs to be employed by the teacher who is seen as a facilitator for students to learn from their mistakes. The teacher who follows this approach is responsive to students’ needs and sessions are flexible. It can be argued that all entrepreneurship programmes should follow this approach so that students are able to see all the dimensions associated with entrepreneurship and realise that learning theory is only one element of entrepreneurship education.

Ultimately without a clear consensus as to the definition of an entrepreneur, it is understandable that the content of a typical entrepreneurship course varies according to the teacher’s personal preferences as to definition and scope (Sexton and Bowman 1984). This is not such a big problem so long as the teacher has the relevant experience and knowledge in the field but Sexton and Bowman (1984) argue a problem may arise when the teachers are simply people who volunteer to teach the subject and have no real expertise in the field. Obviously this problem will be even worse when the level of education gets higher. In such cases it can be stated that students would be unlikely to gain the skills and knowledge required to become a successful entrepreneur.

### ***Impact of Entrepreneurship Education***

Education in general is confirmed to have a positive impact on entrepreneurship (Robinson & Sexton, 1994). They found in their study that there is strong relationship between education and the probability of becoming an entrepreneur and the probability of having success as an entrepreneur. However, they did not differentiate between the various kinds of education and disregarded the possibility of specifically designed entrepreneurship education programmes.

The overview of impact studies in entrepreneurship education strongly indicates a positive impact of entrepreneurship education. The positive impact is further complemented by meta-studies of entrepreneurship education (Pittaway et al. 2007; Mwasalwiba, 2010). However, (Von Graevenitz et al., 2010; Oosterbeek et al (2010)) state that little is known at this point about the impact of these (entrepreneurship) courses. In particular, it is largely unknown how the courses impact on students’ willingness to engage in entrepreneurial activity.

### ***Models***

Many models and theories have been developed and put forward so that research into entrepreneurship education can grow. Ronstadt (1990) theory for example put forward a theory based upon programme offerings and how entrepreneurship courses are taught. Ronstadt argued that a programme, which followed “the old school”, would be based on action and being exposed to the right people who could help with one’s entrepreneurial success. However Ronstadt argued that this programme was dependent upon individuals possessing the right human traits and characteristics. “The new school” still focuses upon action but also involves a great deal of experience. Ronstadt states that entrepreneurial success is based upon a combination of human, venture and environmental conditions.

Furthermore, Ronstadt (1987) also provided a two way continuum model to aid with entrepreneurship course design. The first continuum deals with whether a course should be unstructured or structured. It is argued that courses should be more unstructured due to the dynamic entrepreneurial environment present in today’s world. The second continuum of the model is called “entrepreneurial know-how/entrepreneurial know-who” which explains that an effective entrepreneurship programme should equip students with an entrepreneurial

mindset but also help students form a network of contacts who can aid with their entrepreneurial success in the future.

Both contributions put forward by Ronstadt help show that in order to benefit from an entrepreneurship programme a combination of many factors is required but one could argue that certain factors benefit certain individuals more than others so the field of entrepreneurship education and entrepreneurs should be treated subjectively as opposed to objectively. Not only this, but Ronstadt (1987) argues that entrepreneurship courses should be unstructured but it can be said that this is not possible in an academic context particularly where assessments require structure. This is an area, which has not been addressed in Ronstadt's theories.

Another important model used in studies has been the "Teaching-Learning Process Model" devised by Gage and Berliner (1984), which looks at how to develop a teaching method that will complement the unique characteristics of students, in this case entrepreneurship students. It describes four phases, which include what the teacher must do before instruction, which involves deciding teaching objectives based on students' characteristics. The second phase looks at how the teacher can use their ability to motivate students. The third phase involves carrying out the actions and the final phase is evaluating the instruction, which has been carried, and possibly re-using some parts of the process (Cited in Sexton and Upton 1987).

These models will form the framework for this study as they support the development of hypothesis and ultimately give rise to new findings which enlarges a particular field.

### **Programme Evaluation**

Entrepreneurship education programmes' evaluation is currently receiving the needed attention from stakeholders. Given the interest and investment in entrepreneurship education, key stakeholders are eager to find out if it is worth investing in (Charney and Libecap, 2000). They believe that the purpose of programme evaluation is to produce information which can help make a decision about modifications to the programme. There are no universally accepted evaluation indices for entrepreneurship education programmes despite its importance in the entrepreneurship literature (Nyonkuru, 2005). One of the reasons for the lack of universally accepted measures, in the opinion of Alberti et al. (2004) is that entrepreneurship education addresses a huge audience and it is likely that each of these groups will need different assessment criteria in order to evaluate the outcome of their different objectives.

However, several efforts have been made to assess the effectiveness of these programmes despite the challenges involve in the evaluation process. (Maritz et al., 2012; Kailer 2007) believes that any assessment of the effectiveness should commence with the goals and objectives of the programme. (McMullan et al. 2001) suggest that the best way to evaluate a training programme is to relate the programme's outcome directly to its objectives. Henry et al. (2003) opine that assessment mechanism can be via knowledge measurement by assessing participants' understanding of entrepreneurship. In this instance, the quality of participants' entrepreneurial ideas before and after the programme can be assessed. This reflects the position of (Kurato, 2005) that entrepreneurship education is not all about venture creation.

From the reviewed literature, it is evident that despite the lack of consensus on its definition, entrepreneurship and the entrepreneur play a significant role in the society. This has awakened interest in entrepreneurship education as a panacea to many national challenges. This has inevitably led to the question as to whether entrepreneurship can be taught and if it can be taught, what really should be the nature of such programmes for them to be effective.



## METHODOLOGY

This chapter explains and justifies the research methodology used in this study and relates it to the objectives of the study. The Entrepreneurship module in Cape Coast Polytechnic is coursework based and runs over two semesters for the School of Business and the School of Applied Sciences and Arts. However, the School of engineering takes the course for a semester. The course is compulsory and is undertaken by all HND Students. The learning outcomes consist of students understanding why entrepreneurship is so important and why people choose to set up their own business along with the barriers that may be faced when deciding to do so. Again, students benefit considerably as they learn about what is required to set up a successful business in such a competitive business world. They should be equipped with valuable skills as a result of completing the modules, which will be of benefit to them whether they decide to set up a business in the future or not.

This research study focused on an institution of higher education analysing its entrepreneurship education provision. The information discussed was based on the outline of the entrepreneurship module of Cape Coast Polytechnic. The study population was chosen because of its involvement in entrepreneurship education.

Questionnaire was designed as an instrument of data collection to gather the opinion of students towards the entrepreneurship module. The majority of the questions included were centred on different aspects of the entrepreneurship module since the objectives of the study were focused upon module effectiveness and students' satisfaction with the module. The questionnaire contained items relating to various elements of the module. Such questions were suitable in order to obtain a clear understanding as to whether students felt the module as used by the institution was effective. Questions concerning motivation, improved understanding in the field among others was used as the measure of student satisfaction because it can be argued that these are the main elements that determine students' satisfaction of the module.

The questionnaire was administered to 196 respondents from a sample frame of 981 students who have taken the entrepreneurship module in 2013/2014 academic year using purposive and quota sampling. This procedure was used and deemed appropriate giving the fact that the study only aimed at finding the views of HND students who have undertaken the entrepreneurship module. Table 1 shows the sample frame and the sample size that was chosen for the study.

**Table 1. Population and sample size**

<i>Programme Group According to</i>	<i>Population</i>	<i>Sample Size (20%)</i>
School of Business	620	124
School of Applied Sciences and Arts	115	23
School of Engineering	246	49
Total	981	196

\*Sample size based on: Ary et al. (1990)

Source: Field Data (2014)

Students were required to first provide some basic information concerning their degree, ethnic origin, father's occupation and intended occupation. This was decided upon, as it would help show any diversity present between students that take the module. The majority of questions included were centred on different aspects of the entrepreneurship module since

the objectives of the study were focused upon module effectiveness and students satisfaction with the module. In general, it can be said that the questionnaire were designed in a manner similar to module evaluation questionnaires, which students complete at the end of a module. The questionnaire contained questions regarding various elements of the module in order to obtain a clear understanding as to whether students felt the modules were effective.

A pilot version of the questionnaire was administered to ensure internal consistency and clarity. There were no significant problems resulting from the pilot study and thus the same questionnaire was used, with no revision made when administering the final version to students. The data were collected by two independent research assistants during scheduled lecture periods. Students were given clear advice that participation was entirely voluntary and assured of the confidentiality of the information they will provide.

## RESULTS

This study looked at the perception of students towards the HND entrepreneurship programme. Table 2 shows the results concerning the usefulness of the core pamphlets and textbooks which students used as well as whether they felt that they had an improved understanding of concepts in entrepreneurship as a result of the module. Results relating to students motivation to take the entrepreneurship module and the clarity of the assessment criteria are also displayed.

From Table 2, it is clear that majority of the respondents (75.5%) were satisfied with the usefulness of the course’s pamphlets and core textbooks. However, this does not dismiss the fact that 17.3% of the respondents did not feel the same. Again, 73.4% (strongly agree or agree) of respondents said the module helped improved their understanding of the concepts in the field. However, 15.3% disagreed with 11.2% having no opinion. With all the modules a certain level of motivation is required in order to do well. When look at both the numbers of responses for “Strongly Agree” and “Agree” it is clear that many students were motivated to do well on this module. Overall, 71.4% of respondents stated that they were motivated to do more than the minimum requirements for this module. Also, more than 50% of the respondents thought the assessment criteria were not clearly explained.

**Table 2. Key elements of the module**

<i>Statement</i>	<i>Strongly Agree (%)</i>	<i>Agree (%)</i>	<i>No Opinion (%)</i>	<i>Disagree (%)</i>	<i>Strongly Disagree (%)</i>
Module offers improved understanding of concepts in the field	17.3	56.1	11.2	10.2	5.1
Modules provide motivation and interest to study	21.4	50.0	11.7	11.2	5.6
Clarity of assessment criteria	14.3	25.3	5.1	35.7	19.6
Pamphlets [Handouts] and core textbooks are useful	49.0	26.5	7.1	12.8	4.6
Module are quite comprehensive and clear	45.0	30.5	5.5	9.0	10.0
Adequate learning and supporting materials are available	55.5	20.0	3.0	10.0	11.5

### Areas Where Students Wanted Further Explanation

Respondents were asked about the areas of the module where further explanations were needed and seven different responses were given which is shown in Table 3.

**Table 3. Areas where students wanted further explanation**

<i>Areas</i>	<i>Response</i>	
	<i>Frequency</i>	<i>Percentage</i>
Business plan structure	90	45.9
Finance and Accounting	58	29.6
Interaction with local SMEs	26	13.3
Lectures on laws and regulations	7	3.6
Lectures about practical cases	6	3.1
Marketing	5	2.6
Structural HRM	4	2
Total	196	100

From Table 3 students were of the view that Business Plan Structure and finance need more emphasis and attention recording a total of (75.5%). An interesting similarity is present between this study and the study conducted by Carter and Collinson (1999) where it was found that students needed to be taught more about financial management within the field of entrepreneurship. However, areas such as Marketing and Structural HRM did not record greater responses as both discipline collectively recorded 4.6%. The reason is not explicitly clear, and perhaps needs further investigation. However, the researcher believes that the significant numbers of the respondents already have business background which enjoins them to do marketing and as such they do not need any further tuition.

### Preferred Methods of Being Taught Entrepreneurship

Asked the students’ preferred methods of entrepreneurship tuition, Table 4 presents their responses.

**Table 4. Students’ preferred methods of being taught entrepreneurship**

<i>Methods of Teaching Entrepreneurship</i>	<i>Response</i>	
	<i>Frequency</i>	<i>Percentage</i>
Talk by external speakers	101	51.5
Practical lectures involving group work	58	29.6
Case studies	25	12.8
Use of theory	12	6.1
Total	196	100

Most of the students preferred the use of external speakers and group work (81.1%) while the use of theory recorded the least. This supports the notion by (Gibb, 1996) that in order to successfully teach entrepreneurship an enterprising approach which includes the use of external speakers and group work need to be employed. The teacher who follows this approach is responsive to students’ needs and sessions are flexible.

### Reasons for Recommending the Module

The students were asked why they will recommend the module to colleagues if it was not compulsory. Figure 1 explains the reasons for the respondents’ recommendations.



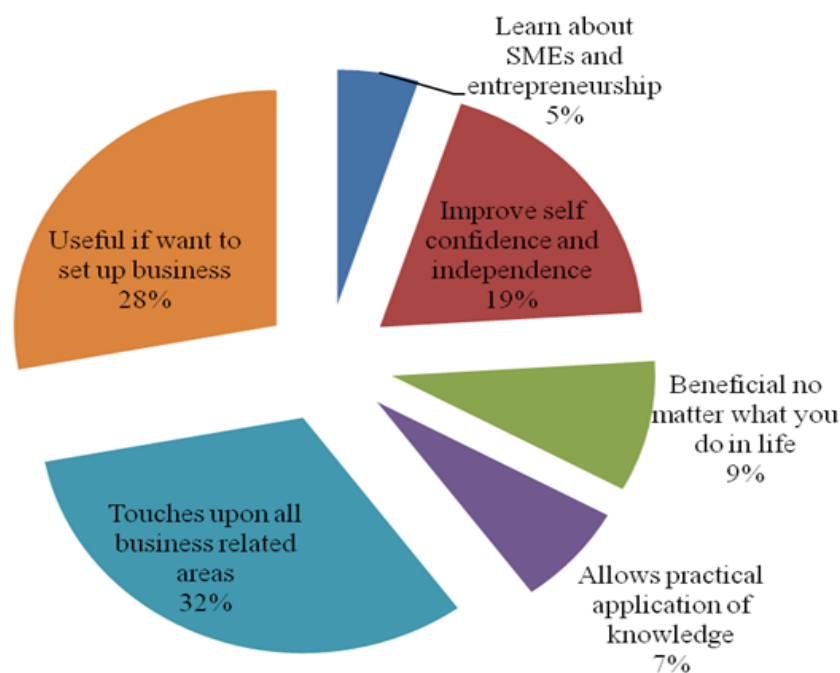


Figure 1. Respondents Reasons for Recommending the Module

As it can be seen from Figure 1, most students believe that the module is useful if one want to set up a business as well as improved self confidence and independence which relates to the unique characteristics of entrepreneurship. This supports the notion by Sexton and Upton (1987), entrepreneurship students can be depicted as independent individuals who dislike restraint, restriction and routine. It also offers practical application of knowledge and provides basic ideas about small-medium enterprises and entrepreneurship as well as offering the students with improved self-confidence and independence.

### Main Barriers to Successful Entrepreneurship

As a result of completing the entrepreneurship module, students should have become aware of barriers which affect the setting up of a successful business. Respondents gave a variety of answers which is shown in Table 5.

Table 5. Main barriers to successful entrepreneurship

Barriers	Response	
	Frequency	Percentage
Finance/Start up capital	106	45.6
Poor infrastructure	57	24.7
Too much competition	30	12.8
Legislation	20	8.4
Lack of experience	9	4
Poor economic climate	7	3
Adaptation to the market	3	1.5
Total	232	100

All of the answers listed in Table 5 are likely to have come from students' knowledge of the business world combined with what they learnt from the module. The most common response with 45.6% was finance/start up capital. Respondents stated that raising the capital required

to fund the new venture is a very difficult procedure. This was one area, which was needed to be detailed in the module and it may have given students an indication as to the difficulty involved in raising the funds required. Poor infrastructure was also high on the response. The low response rate for “Poor economic climate” should be noted as this answer was expected to be higher given the current economic condition in the country.

### Students’ Overall Satisfaction with the Module

Figure 2 depicts students overall satisfaction of the entrepreneurship education. Even though most of the respondents showed positive emotions towards the module, a significant number (30%) were not satisfied with it.

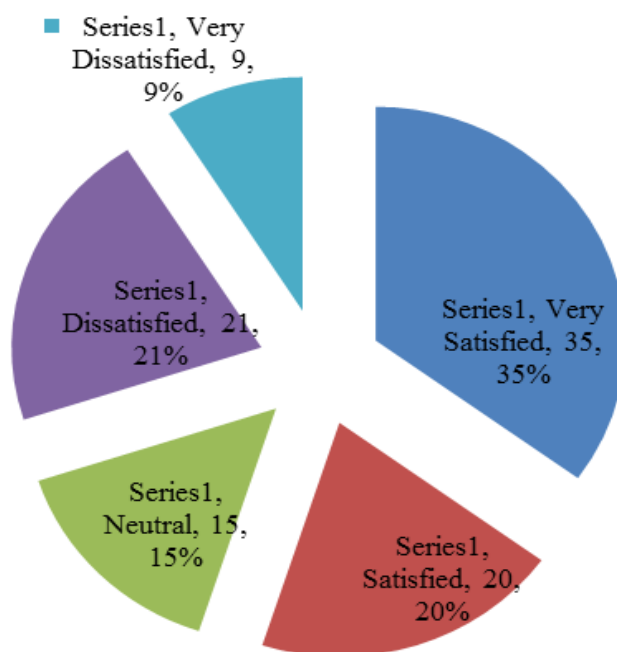


Figure 2. Students’ overall satisfaction with the module

### Further Comments about the Module

Open statements were made to gather further observations from the students regarding the module. It was realised that students were not very sure about the objectives of the programme. This is because they were not giving detailed course content before the commencement of the course. It was felt that lecturers only give them the course outline without explaining the key objectives it is intended to serve. Again, respondents complained about the poor organisation of the module and felt that the lecturers handling the course should have a common course outline so that they can have discussions with their colleagues from other departments who are thought by different lecturers. This they argue will help them to network with other students by enhancing knowledge sharing in the discipline.

### DISCUSSION

The results show that the module overall was effective in the areas of improved understanding of concepts in the field of entrepreneurship as well as provide motivation. This is likely to be due to the business plan which students were required to complete. As it was an independent piece of work and covered many different areas, it provided students with a great understanding of entrepreneurship. According to Solomon (2007), business plan is a vital element of entrepreneurship courses which is clearly the case for the entrepreneurship module in Cape Coast Polytechnic.

Motivation can be argued to be an important measure of student satisfaction with a module because if a student is happy with a module then it is likely they will be motivated to do well. Entrepreneurship students have been found to have a high need for achievement (Gurol and Atsan, 2006). In this study, this can be argued to relate to the fact that the majority of students were motivated to do more than the minimum requirements which could be an indication of their high need for achievement. However, one must consider the possibility that students were motivated to do more than the minimum requirements because for example they found the lectures poor and thus felt they had to do extra work in order to pass the module. With this in mind one must remember that motivation is not necessarily related to satisfaction but could be an indication of students' high need for achievement.

What is interesting to note from the results is that students stated the modules were useful in improving their understanding of entrepreneurship and they were motivated but they thought that the assessment criteria were not clearly explained. It can be said that without a clear assessment criteria then students will not know how to perform in the module and consequently may not be motivated to do more than is necessary. However, the opposite occurred in this research, as students were motivated even without having clear assessment criteria to follow. Even with the assessment criteria not being clear to students, they still believed the module helped improve their understanding of entrepreneurship, which can be argued to be the biggest indication of module effectiveness.

Students really liked the pamphlets given to them by lecturers. This may be due to the difficulty in getting materials from the school library and the difficulty in accessing the internet on campus. Again, students were appreciative of the key concepts in the module and ready to do more if given the opportunity which is suggested to be a characteristic of entrepreneurially inclined students (Gurol and Atsan, 2006).

The results concerning the external speakers are very interesting because majority of students prefer the use of external speakers as they argue it will help to improve their understanding about the module. External speakers are not currently used in the teaching of the module. As guest speakers form an important educational experience for students it can be argued that the majority of students will benefit from this educational experience. This will help strengthen their entrepreneurial intentions and may have increased their intentions to set up a new business (Turker and Selcuk, 2009).

Many different responses were given concerning barriers to successful entrepreneurship. Although this question does not directly relate to module effectiveness, one could argue that it indirectly relates as students answers may have come from the knowledge acquired as a result of taking the module. Students were generally satisfied with the module and were willing to recommend the module to other students if it was not compulsory.

## **SUMMARY/CONCLUSION/RECOMMENDATIONS**

The findings in this study indicate that the entrepreneurship module is effective in certain areas whilst ineffective in other areas. Students appear to have an increased understanding of concepts in the field as a result of taking the module. They were also motivated to do more than the minimum requirements for the module which can be argued to relate to their high need for achievement which is suggested to be a characteristic of entrepreneurially inclined students (Gurol and Atsan, 2006). Students were satisfied with the module and will recommend the module to other students.

However, it can be argued that the module was ineffective with regards to the method of being taught and students' preferred the use of external speakers, more group work and case

studies. Again, students wanted further lectures in areas like business plan and finance. They felt that lectures were not well coordinated with the module assessment.

Given the mixed responses, it is difficult to draw solid conclusions concerning module effectiveness. The mixed findings can be argued to relate to the argument made by (Gibb, 1996), that students themselves may have different preferred learning styles but that a key objective of training and education should be to enrich their range of learning styles. All students are different and will consequently have different needs. However, as noted by Collins et al. (2004) many institutions are struggling to meet students' needs which are clearly the case in this study due to the amount of negative feedback concerning certain areas of the module.

There is the need to have clear objectives for the module and these must be communicated to the students because entrepreneurship education has a wide range of focus. The absence of clear objectives results in differences in perception (Henry et al., 2003). Entrepreneurship education needs a paradigm shift if stakeholders want to realise its benefits. For example, guest speakers who are entrepreneurs need to be invited regularly to talk to the students since they act as role models.

Although the findings in this research cannot be generalised they can be used as basis for future research in many different areas in order to help further expand the field of entrepreneurship education. While the Schools of Business and Applied Sciences undertake the course for two semesters, the School of Engineering do it for only a semester. Is a longer programme better or more effective than a shorter one? More studies need to be done and Oosterbeek et al. (2010) underline duration of a programme as a promising avenue of research.

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